

bp**MAR 29 2005**

CUSTOMER NO. 04249

BP America Inc.
BP Legal
Mail Code 5 East
4101 Winfield Road
Warrenville, IL 60555
Tel No.: 630/821-2464
Fax No.: 630/821-3383

FACSIMILE TRANSMISSION

DATE: March 29, 2005

TO: Commissioner for Patents
United States Patent and Trademark Office

FAX NO.: 703-872-9306

THIS TRANSMISSION CONSISTS OF

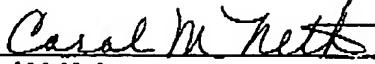
Pages (including this page) 19

FROM: Carol M. Neth
Paralegal, IP GroupRE: Customer No. 04249
Application No.: 10/645,429
Filed: August 21, 2003
Examiner: Ebenezer O. Sackey
Group Art Unit: 1626
Attorney Docket: 37241-01

Attached are the following documents:

One Month Extension of Time
Response to Office Action dated December 2, 2004
Credit Card Form PTO-2038

Certificate of Transmission
I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. 703-872-9306 on March 29, 2005, by:


Carol M. Neth

This communication contains information from BP p.l.c. or its affiliates and is intended only for the personal and confidential use of the addressee(s) named above. This communication may be an attorney-client communication and/or work product and as such is privileged and confidential. If the reader of this message is not the intended addressee(s) or an agent responsible for delivering it to the intended addressee(s), you are hereby notified that you have received this document in error and that any review, dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by return e-mail or FAX, as the case may be, and delete or destroy the original communication.

RECEIVED
CENTRAL FAX CENTER

MAR 29 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): ROBERT P. HEPFER, CRAIG) PATENT APPLICATION
T. MILLER, GREGORY A.) Confirmation No. 8069
NORENBERG, THOMAS G.)
ATTIG, JOHN R. BUDGE)
APPLICATION NO.: 10/645,429)
FILED: August 21, 2003) Group Art Unit: 1626
FOR: TWO-STAGE PROCESS FOR THE)
HYDROGENATION OF MALEIC ACID) Examiner:
TO 1,4-BUTANEDIOL) Ebenezer O. Sackey
) Attorney Docket No.:
) 37,241-01

RESPONSE

Attention: Group Art Unit 1626
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is in response to the office action mailed December 2, 2004, for which a one-month extension of time to respond is respectfully requested.

REMARKS

The present invention relates to a process for the hydrogenation of maleic acid to 1,4-butanediol (BDO), gamma-butyrolactone (GBL) and/or tetrahydrofuran (THF). This reaction proceeds in two steps. The maleic anhydride is first hydrogenated to succinic acid. The succinic acid is then hydrogenated to BDO, GBL and/or THF. These reactions will proceed over a wide range of temperatures and prior art reaction temperatures above 150°C were typical.

In the practice of this process, the internals of the reaction vessels, piping and equipment are in contact with maleic acid. Corrosion of process equipment is an issue. Corrosive conditions shorten the expected life of process equipment (e.g. hydrogenation